

EMERGENCY  
COMMUNICATIONS  
PUBLIC SERVICE  
EXPERIMENTATION  
INFORMATION  
EDUCATION



ARRL affiliated  
Club # 2047

Emergency Communications  
for:

COUNTY OF  
CUYAHOGA



Div. of  
Emergency Assistance & Planning

P.O. Box 30529  
Cleveland, Ohio 44130

Not for profit Ohio corporation tax-exempt under IRS Section 501(c)(3).

CODE PRACTICE

SUNDAYS 8 PM

145.29

6,9,13,16,20 & 24

W.P.M.

**North Coast**

**Communicator**

INFORMAL NETS

SUNDAYS 9 PM

145.29

WEDNESDAYS 7 PM

3.870 +/-10

NOVEMBER, 1986

Board Meeting Notice

6:00 PM Thursday November 6, 1986 at Denny's Restaurant, 25912 Lorain Road (on the North Side of Lorain between Great Northern Blvd. and Brookpark Road).

General Meeting Notice

7:30 PM Thursday November 6, 1986 at the North Olmsted branch of the Cuyahoga County Public Library, 27425 Butternut Ridge Road (on the South side next to North Olmsted Middle School between Dover Center and Lorain Roads).

\*\*\*\*\*  
\* North Coast ARC 1987 OFFICERS & TRUSTEES WILL BE NOMINATED AT THIS MEETING \*  
\* You must be at this meeting, or have a letter on file with the club secretary, Steve N08M \*  
\* in order for your nomination to be on the ballot \*  
\*\*\*\*\*

WELCOME NEW NORTH COAST A.R.C. MEMBERS Complete updated NCARC roster enclosed.

Help give a warm welcome to the following new members since the last regular issue of the North Coast Communicator: Ray Smith W8ADV, Jack Andrisin N8HVQ, Marc Dunkel KE8BN, Bill Maerkle N8CQD, Carl Beduhn N8HUR, Bill Rohrer W7LJ, Bob Bentley WD8OCL, Chuck Sommer N4OSD, John Pearl K8RWR, Fred Helwig Jr WA8TMK and Steve Elder KA8VYN.

CONGRATULATIONS TO THOSE MEMBERS WHO RECENTLY RECEIVED NEW CALL SIGNS

Nan Kersten N8HSE (ex KA8DGO), Monica James N8HTX (ex KA8YYH) and Jack Andrisin N8HVQ (ex KB8AIF).

VOLUNTEERS NEEDED FOR PUBLIC SERVICE EVENT - SUNDAY, NOVEMBER 23, 1986

Please volunteer your time to assist with the needed amateur radio communications that will be needed for the Cleveland West Classic 13.1 Mile and 5K runs starting at 9:00 AM in the Metropark. Please contact Pauline (KA8FOE) or Rick (K8SCD) at 779-8999. Public Service justifies the frequency spectrum that amateur radio enjoys. If you haven't volunteered for a public service event yet, now is your chance to get some experience.

AMATEUR RADIO CALL SIGNS as of October 1, 1986 - Eighth District

Groups: A-Extra: NU8C B-Advanced: KE8HQ C-General/Tech: N8HVK D-Novices: KB8AKH



MINUTES OF THE 08/21/86 TRUSTEE MEETING de Tim Hitesman NR8T

The meeting was called to order at 19:14. In attendance were Dick (WD8ISB), Ray (WD8MHL), Glenn (WD8OMW), Rick (K8SCD), Mike (K9SSL), Tim (NR8T), Bob (K8TTZ). Visitors were Dave (N8ETY), and Jim (N8GJR). Minutes of the 08/07/86 meeting were reviewed.

On a motion by Mike (K9SSL), Jim (N8GJR) was appointed as a trustee.

Dave (N8ETY), as chairman of the financial committee reviewed the work of the committee and presented a series of recommendations on behalf of the committee. Motion by Dave (N8ETY) that the Sunshine policy be changed to provide for an appropriate card. Carried. Motion by Mike (K9SSL) that all Fiscal Year '86 debt be paid from proceeds of FY '87 fund raising efforts. Carried. Motion by Glenn (WD8OMW) that all other fund raising proceeds from the current drive be held in reserve until completion of the drive in October. Carried. Motion from Mike (K9SSL) that up to \$50 be spent for club logo artwork and that charges of \$1 for jackets and \$.50 for hats/shirts be added to actual costs. Carried. This action confirms a previous decision by the trustees and Steve (N08M) will be instructed to proceed. Motion by Mike (K9SSL) that donations be collected at the Cleveland Hamfest to be forwarded to Westlink on behalf of the NCARC. Carried. Motion by Mike (K9SSL) that, because of the importance of field day, \$50 of our operating funds be authorized for the field day committee. Additional funds required must be generated by the club. Carried. Motion by Bob (K8TTZ) that we rescind previous authorization to purchase US and World call books. Carried. Motion by Ray (WD8MHL) that we rescind previous authority to purchase a club subscription to World Radio. Carried. Motion by Ray (WD8MHL) that the club saving account be moved to the same institution as the club checking account in interest of simplicity. Carried. Motion by Ray (WD8MHL) that the trustees pursue completion of an agreement to purchase the 145.290 repeater from Rick (K8SCD) and Pauline (KA8FOE) Wells, and present the agreement to the membership for approval. Carried.

The trustees thanked the finance committee for their work on this difficult subject.

On a motion by Mike (K9SSL) the meeting was adjourned.

MINUTES OF THE 09/04/86 TRUSTEES MEETING de Steve (N08M)

The meeting was called to order at 1802 by the President. In attendance were Steve (N08M), Rick (K8SCD), Pauline (KA8FOE), Tim (NR8T), Glenn (WD8OMW), Steve (N8GNJ), Jim (N8GJR), Ray (WD8MHL) and Mike (K9SSL). Guests included Dave (N8ETY) and Jason (KA8ZVX). The minutes of the prior regular trustee meeting were approved as published in the Communicator. The minutes of the special trustee meeting were summarized.

A letter of resignation from Tom (N8ETP) was read and discussed. On the motion of Steve (N08M), Tom's resignation was accepted.

Candidates were taken for members to be recognized at the upcoming Cleveland Hamfest Banquet. A joint award to Glenn (WD8OMW) and Jim (N8GJR) was decided upon.

Glenn (WD8OMW) gave the treasurer's report.

NCARC will support a Novice Class to be held at the Bay Village Middle School.

The meeting was closed at 1912.

MINUTES OF THE 09/04/86 GENERAL MEETING de Steve (N08M)

The meeting was called to order at 1940 hours by the President. There were five guests, 31 members and eight trustees present. The minutes of the prior general meeting were approved as published in the Communicator. The treasurer's report was read by Steve (N8GNJ).

Dave (N8ETY) gave a Finance Committee report. The operating budget will be printed in the Communicator.

The upcoming Cleveland Hamfest was discussed.

The meeting was closed at 2100 hours. Door prizes were won by Ray (WD8MHL), Bill (KA8CKZ), George (KA8ZTY), George (K8WNE), Chuck (K8RSH), Gene (WA8DYL), Glenn (WB8CDA) and Heinz (KC8F). A \$10.50 50-50 raffle was won by John (K8RWR).

The program was given by Steve (N08M) who gave a synopsis of information learned at a seminar on the recent Miamisburg train derailment.



#### MINUTES OF THE 10/02/86 TRUSTEE MEETING de Steve (NO8M)

The meeting was called to order at 1807 by the President. In attendance were Ray (WD8MHL), Jim (N8GJR), Rick (K8SCD), Pauline (KA8FOE), Tim (NR8T), Dick (WD8ISB), Steve (NO8M) and Glenn (WD8OMW). Guests included Larry (KA8WRZ), Dave (N8ETY) and Jeff (KR0J).

A request for publicity for the NOARS Christmas Banquet has been received. It appears that this year's banquet will be a NOARS affair without NCARC co-participation. Artwork to polish up the logo is needed. A request will be published in the Communicator. A treasurer's report or summary will be printed in the newsletter. Continued emphasis on tax exempt status is needed. Three magnet mount antennas were purchased prior to the last public service event. On a motion from Tim (NR8T) it was decided that reimbursement will be made and it will be taken from a new equipment purchase account in the budget. The need for some type of petty cash account for such purchases was discussed. A need for Bylaw review may be indicated. Three members have expressed an interest in filling the vacant trustee position. All three were felt to be excellent choices. The position was filled by Larry (KA8WRZ). The repeater noise problem was discussed. Glenn (WD8OMW) was presented with the award given at the Cleveland Hamfest Banquet. Glenn (WD8OMW) sponsored the motion to close the meeting at 1922 hours.

#### MINUTES OF THE 10/03/86 GENERAL MEETING de Steve (NO8M)

The meeting was called to order by the President at 1940 hours. In attendance were five guests, 27 members and ten trustees. There were 187 members in the Club at the time of the meeting. The treasurer's report was given.

Tim (NR8T) gave an overview of the agreement to purchase the 145.290 MHz. repeater from Rick (K8SCD) and Pauline (KA8FOE). Steve (NO8M) made a motion that the contract which was presented be accepted. On a motion from Bob (W8IO) the previous motion was tabled. The contract and an explanation will be published and the issue again taken up at the November General Meeting.

Door prizes were won by Dave (N8ETY), Bob (W8IO) and Bill (W3IGD). An \$8.25 50-50 raffle was won by Fred (WB8UDA).

#### BYLAWS de Steve (NO8M)

Interest has been expressed in reviewing and perhaps modifying the Bylaws. Some areas of interest follow:

Are there too many trustees? Getting a quorum in the summer months is sometimes difficult. If the number of trustees were dropped from the current 13 to 9, we would need five to make a quorum. This would mean that we would have five trustees and four officer/trustees. (The president has no vote except to break a tie.)

An problem arose in a past trustee meeting when a trustee resigned and we could not muster a quorum to replace that trustee. It seems that we only need a majority of the trustees in office to replace a trustee who resigned. However, a majority of the whole authorized number is needed to conduct business. A trustee's resignation must be accepted (by a majority the whole number) to have the resignation be official. Hence, if seven of our nine trustees were to resign, we could not accept their resignations (we would only have six left) and North Coast would cease to exist. Should the bylaws read that a trustee's resignation is official upon receipt of the resignation by the Secretary? Should a quorum be defined as a majority of the trustees in office?

The term of the trustees (three years) may be too long to foster interest in the position. Should a trustee term be changed to yearly or bi-yearly? Current bylaws require that to change a bylaw requires two-third vote of the membership. Many persons have joined our club without an interest in active participation. They support North Coast, they want to get the Communicator, perhaps they like to sell candy. They belong for whatever reason. When asked to vote on an an issue such as a bylaw change, some of these people do not wish to participate due to their not being involved in the other processes. Just getting two-thirds of the members to vote may be a problem. How about allowing a bylaw change on the affirmative vote of two-thirds of the ballots submitted?

Well, there are the suggestions made so far. Have any more? Let me know.



### NOMINATIONS

Per our bylaws, trustee nominations will be taken at the November general meeting. Please consider if you may be interested in serving the club in this position.

Trustees must have an amateur radio license of any class. They are elected for a period of three years. The trustee meeting lasts about one hour and is scheduled prior to the general meetings. A trustee is restricted from missing three consecutive trustee meetings.

This year we will be taking nominations for president, vice-president, secretary, treasurer and 7 trustees. (Officers are also trustees.)

The benefits of the trustee position is in knowing you took an active part in the direction and guidance of North Coast. North Coast is still in nursery school. It needs the advise and guidance of active amateurs. Help us grow.

### NORTH COAST DONATIONS ARE TAX DEDUCTABLE de Steve (N08M)

North Coast is incorporated as a non-profit corporation. This does not make us tax-exempt. Many radio clubs are incorporated. What we did do is to file with the IRS for tax-exempt status. We received a favorable ruling. We are just like many other charitable, scientific and educational organizations: ANY DONATIONS TO NORTH COAST CAN BE CLAIMED AS A DEDUCTION FROM YOUR TAXES. This included monetary donations and those of equipment. This does not include your club dues. North Coast will be more than happy to provide a receipt for donated items for your use in tax-time figuring.

### SCANNER INFORMATION WANTED de Bill (N8CQD)

Does anyone know the frequency of the Cleveland Hopkins Airport Police? They do not use the normal Cleveland Police channels nor are they on the airport fire or maintenance channels. Likewise, if anyone needs local frequencies or codes, I know most of them. Just ask. 779-7311.

### BENCHER PADDLE INSTRUCTIONS NEEDED

If you have a set of Bencher Paddle instructions, or one that I can make a copy of, please contact me. Many thanks - Ed Milliron KA8ZRH, telephone 651-8191 (UL) or mail to me at: 4009 Carlyle Ave., Cleveland, Ohio 44109.

### QUEEN MARY ADDRESS

If you have any information on mailing QSL cards to the ocean liner Queen Mary please give me a call. Many thanks - Ed Milliron KA8ZRH, telephone 651-8191 (UL) or mail to me at: 4009 Carlyle Ave., Cleveland, Ohio 44109.

### NCARC REPEATER OWNERSHIP

At the October 4th General meeting, several ideas were expressed by a few of the members present that warrants a bit more study of various options available to the club. If you would like to attend any meeting pertaining to these additional options, please attend the upcoming Trustees meeting 6:00 PM Thursday November 6th at Denny's restaurant on Lorain Rd. in North Olmsted, or contact any of the NCARC Officers or Trustees to express your desire to attend any special meeting arranged for the purpose of the study.

### NORTH COAST VE EXAM REPORT FOR OCTOBER 4th

North Coast ARC held a VE Exam Saturday October 4th in Maple Heights, Ohio. Headed by Shirley KA8Y, and aided by Dan KB8A and Tim NR8T, three individuals received upgraded privileges, and another received a 20 WPM code credit towards their Extra class.

Reports indicated that the session ran smooth and we all thank Shirley, Dan and Tim for the giving of their time and talents so others may benefit.



1986-87 OPERATIONAL BUDGET of the NORTH COAST AMATEUR RADIO CLUB

Membership based on a 75% retention: Individual 132, Family 15 = 147  
New member enrollment: Individual 22, Family 5 = 27  
Total Membership (thru fiscal 1986-87) = 174

Note: Membership Dues in, will reflect "prorated dues"

MONIES IN

Membership dues.....	\$1755.00
ARRL Membership Renewal/New Rebate.....	50.00
Meeting Coffee/Donut Donations & 50/50 Raffle.....	240.00
Cleveland Hamfest Advanced Ticket Sales.....	50.00
TOTAL MONIES IN (*).....	<u>\$2095.00</u>

\* These monies do not include Fund Raising or Donations.

Fund Raising and Donations have no background history.

MONIES OUT

Newsletter Printing.....	\$ 480.00
Meeting Expenses.....	240.00
Repeater Insurance.....	49.00
General Liability Insurance.....	160.00
Treasurers' Bond.....	22.00
Autopatch Phone Line.....	240.00
Long Distance Phone Charges (Westlink Voice Reports).....	75.00
P. O. Box.....	22.00
General Postage.....	50.00
Bulk-Rate Postage (Based on 200 mailings per month).....	204.00
Yearly Bulk-Rate Fee.....	50.00
Equipment Maintenance.....	100.00
Club Info/Misc. Printing.....	75.00
Sunshine.....	48.00
TOTAL MONIES OUT.....	<u>\$1815.00</u>

MONIES IN.....	\$2095.00
LESS MONIES OUT.....	<u>-1815.00</u>
BALANCE.....	<u>\$ 280.00</u>

GENERAL COMMENTS

1. This is an Operating Budget. These figures assure that the club is able to meet its' financial obligations.
2. When possible, previous history was used to obtain the figures used.
3. Equipment Maintenance if unused, will remain untouched until needed or at such a time when the trustees and membership vote to allocate it elsewhere.
4. As the club continues to acquire surplus cash, the finance committee will recommend to the trustees and general membership possible ideas for that surplus.
5. The 75% retention of members at renewal time is running almost at 75%.



#### OUR DEEPEST CONDOLENCES GO OUT TO

Mr and Mrs Tom Rudman KD8EX and family on the recent loss of his father.

Mr and Mrs Jim Malone W8PEV and family on the recent loss of their son (Tony - age 14) from a tragic hiking accident in West Virginia.

Mr and Mrs Tim O'Reilly WB8RGK and family on the recent loss of his mother.

Mr and Mrs Bob Bassett N8FKT and family on the recent loss of her father.

#### NCARC TECHNICAL COMMITTEE COMMENT de Jeff KR0J

The Technical Committee is in need of manufacturers technical manuals detailing both analog and digital parts description and test circuits. RCA, Sylvania, Motorola, NEC, Etc. type manuals are needed to assist the technical committee in the development of new circuit ideas. If anyone has any to either loan or donate to the technical committee of North Coast please call me at 631-6087. We are also looking for anyone with technical/engineering skills to help in the development and construction of some of these new ideas. Ideas are needed too. If you have any ideas or thoughts or improvements to our repeater or anything, please call or drop a note to the clubs PO Box. As a final note, the technical committee is working on the noise problem that many of you have experienced on the repeater. As with anything, it takes time around work schedules pending weather conditions to correct the problem in the antenna system.

#### MANY THANKS GO TO THOSE THAT HELPED WITH THE PUBLIC SERVICES ON OCT 19th

North Coast Amateur Radio Club was involved with two public service communications activities on Sunday October 19th.

Tim Hitesman NR8T headed up the operations for the Great Bonnie Bell Run-In which was a 7.5 Mile Run with over a 1,000 runners that ran from Lakewood to Westlake. Those that helped Tim with the event were: Bill Jones KA8CKZ, Don Summer N8FKS, Steve Stroh N8GNJ, Paul Hoegstrom N8HOB, John Pastor K8RZP and Jason Hitesman KA8ZVX.

Rick Wells K8SCI headed up the operations for the Willow-Run Cross-County Horse-Trials in Twinsburg. Those that helped Rick with the event were: Charlie Stien KA8EVS, Skip Hockensmith N8HAD, Glenn Christman WD8OMW and Larry Tews KA8WRZ.

Both of these events could have used additional volunteers. I cannot stress enough the importance of radio amateurs supporting public service needs. Please, volunteer some of your time with a few of the public service activities that our club supports. If you hear a call for volunteers, please contact the person directly, and as soon as possible. You do not have to have any previous public service experience.

#### THOSE THAT HELPED WITH THE HOCKEY TOURNAMENT September 26, 27 and 28th.

Many thanks to those who provided amateur radio public service communications for the TRW Mid-Western Invitational Hockey Tournament.

The volunteers were: Bill Jones KA8CKZ, Paul Hoegstrom N8HOB, Steve Wolf NO8M, Ray Maskow WD8MHL, Glenn Christman WD8OMW, Rick Wells K8SCI, Mike Walker K9SSL, Tim Hitesman NR8T, Dennis Minnick KA8TQR, Bob Mills K8TTZ, Russ Saepic WB8UPA, Joe Walker KA8WJH, Larry Tews KA8WRZ and Dave Hoffmann KA8ZRG.

And, a thank you goes to all NCARC members for allowing the time for this event on the club's 145.290 Mhz repeater during this three day event.

Public service events offer the opportunity for amateur radio operators to practice their skills in handling traffic and interfacing non-amateur radio individuals in dealing with various needs. This practice is invaluable in preparing for emergency situations. I urge more members to consider helping in public service events to sharpen communications skills involving officials or the public. It is also excellent exposure for amateur radio.



### SEPTEMBER 13, 1986 FOX HUNT REPORT

The Fox Jim N8LL (accompanied by Lew WD8DIE and Ken N8ELJ) hid near the model airplane flying field near the I-X Center using a 4 element Yagi which was driven by a motor to change its polarization with 25 watts of power. Jim also used an audio oscillator to try and confuse potential "Hunter" DoppleScant units.

The Hunters (in order of shortest time) were: Dave N8ETY at 20 minutes using a DoppleScant system, Steve NO8M & Mary KA8ZVV at 20 1/2 minutes using a 1/4 wave trunk mounted vertical, Ron N8FCX & Jack KA8ZRF at 22 minutes using a two-element Quad, Rick K8SCI & Pauline KA8FOE at 26 minutes using a two-element Yagi, Bob K8DTS & his daughter Amy at 33 mins using a DoppleScant and John K8RZP at 56 mins using a three-element Quad.

All met at Frankies Pizza on Great Northern Blvd for food, drink, and good conversation afterwards.

During the conversation at Frankies Pizza, the group decided to increase the Fox-Hunt area. It was decided to change the Southern border from Sprague Rd to Route 82.

### OCTOBER 9, 1986 FOX HUNT REPORT

The Fox Dave N8ETY hid at the corner of Battersea and Arundel Roads in Rocky River where he had a view of the Lake/Detroit Exits just west of the Clifton/Lake Road Bridge. He had a ball watching all the "Hunters" go by him and have difficulty in locating how to get to him. His position offered strange signals to search for as he had high mounds of dirt for the ramps and steel overpasses that distorted his radiation in several directions.

The Hunters (in order of shortest time) were: Rick K8SCI & Pauline KA8FOE at 31 minutes using a four-element Yagi, Jim N8LL (accompanied by Ken N8ELJ) in 51 minutes using a DoppleScant, John K8RZP in approx 60 minutes using a three-element Quad, Ray WD8MHL in approx 90 minutes using a five-element Yagi, and Bob K8DTS & Amy in ? minutes using a DoppleScant system. Please excuse the times of the last three as I was not able to receive the actual times of those positions prior to Dave N8ETY leaving for California. Also, three other amateurs also participated: Paul N8HOB, Todd N8HTK & Evan KA8ZLT. I was unsure just who they participated with (which Hunter vehicles), again, please excuse me as I didn't have this information at press time.

Everyone met for food, drink, and good conversation at Frankies Pizza on Great Northern Blvd. afterwards.

### NEXT NORTH COAST FOX HUNT IS SATURDAY NOVEMBER 8th AT 7:00 PM

Everyone is welcome... The Fox will be Rick K8SCL. Hunters meet prior to 7:00 PM to the rear of the North Olmsted Branch of the Cuyahoga County Public Library on Butternut Ridge Road (between Dover Center and Porter/Lorain Roads).

### OPEN LETTER TO ALL NORTH COAST MEMBERS de Dave Kifer N8ETY

I hope you will all take the time to read this letter, for I would like to get something off my chest. As many of you know, I tend to be an outspoken person. I feel that for the most the part I try to speak with the best intentions and toward the benefit of all.

At the September 4th, meeting I gave an overview of the clubs operating budget. Afterwards several members came to me with their opinions and ideas regarding the budet and club expenditures. I truly appreciate their comments and suggestions. HOWEVER, if you feel that something is not right or you are not happy with something that has taken place, DON'T just tell me. PLEASE, have enough concern to speak to the group. Under most circumstances other members have the same feelings as you do. These different ideas MUST be talked about in the open with the rest of the members so that they may also have the opportunity to express their views. This is OUR club, it is not just a handful of individuals. Quite frankly, I can not speak "proxy" for everyone who is unwilling to speak themselves.

Please understand that I offer this as constructive criticism, again this is our club and we all have a right to speak.



**(Cheap)**

# ARTIST NEEDED

Take a look at our club logo. Up there, on top of the page. Wait a minute ... Dang it, Rick! He moved it. Let me see ... oh yeah, its down there on the bottom of the page.

Our original logo contained the 145.290 MHz. frequency inside the state map. That's gone. North Coast is not soley a repeater club. The listing to the right is our reasons for existence. Those items were taken from our articles of incorporation. A bit of club history here. The original founders of the club searched high and low for our post office box. Yep, 529 with the 30 coming from the last two digits of the zip code. What more can you ask for?

The logo can be used in a number of ways. As is, it would make a nice rubber stamp to make our mailings nicer. We currently write in the return address information. Take the address out and add your name in its place and we have a nice nametag. Add another line and we have a letterhead similar to that used on the front page of the Communicator.

Take another look at the logo. It was generated via a computer. It looks OK but it's "blocky". That's how it was generated, with little-bitty blocks. North Coast would like to obtain a rubber stamp for the return addresses, name-tags and (eventually) some coats, hats and shirts. We need our logo polished up. We need an artist. If there is such talent in the club (or if such talent is related closely enough to allow it's encumbrance) please call Steve (N08M) at 777-1177. The trustees have agreed to award one left over candy bar (should any be left over) to the person providing this ministratration. Crispy or almond

de Steve (N08M) 777-1177



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P.O. Box 30529  
Cleveland, Ohio 44130



## COMMITTEE AGAINST MALICIOUS RADIO INTERFERENCE

Over the last several months various articles have appeared in the area repeater and club newsletters describing the use of direction finding equipment and techniques to locate sources of malicious interference.

Many hams from various clubs have gotten together to work on this problem. In order to maximize the effectiveness of this effort, most of the actual operating procedures have had to be kept confidential.

It has been decided that this operation will continue as an on-going activity and therefore be expanded to include a wider base of participants. The committee is a working unit. It has no dues, no newsletter, no formal structure. These facits of most organizations are not appropriate here. Overall, the operations of the committee are supported by donations of time and equipment from concerned individuals, law-enforcement agencies, and various repeater groups.

By and large the methods employed so far are having a positive effect, so there is no reason to make drastic changes or publicize specific details. The key to the operation is that it revolves around a core group (whose participants vary depending on availability) which does the actual work in the field tracking down interference. The members of the group thus work from a growing base of past hands-on experience, but continue to regroup each time there is a new source of interference.

Operations are conducted strictly on a "need-to-know" basis, whereupon members call on each other for assistance only as appropriate. The presidents of the various repeater clubs know how to contact the core group and therefore act as liason for reports. The rest of the membership does not need to know. However, the group can benefit

greatly from input by the general membership committee, such as getting initial information as to the general geographic source of the interference.

Members of the committee are not required to be active in the core group. However, by filling out the information record, they are letting us know that they are interested in helping should we be able to use their services.

Basically, it is time to stand up and be counted. If you are concerned or bothered by by malicious interference and don't know what to do about it, here is your chance. If you are not part of the problem, then try to be part of the solution. Other than getting some personal satisfaction out of presenting your vote of confidence and appreciation to those who have been working so hard, it may just be the most UNrewarding thing you will ever do!

If you would like to lend your support please fill out the Interference Committee Information Record. Please realize that a lack of reply on our part will not mean you have been "rejected".

Remember, there are no newsletters and no mailings. General information will continue to be given out by using the existing repeater club newsletters. You will only be contacted if it appears that some specific information, talent, qualification, etc. which you list or supply with the form correlates with a specific need of the field group.

Please send your form to the LEARA, CARS, HERO, or NCARC club mailing address.

Similarly, if you have information about repeater jamming which you believe can help locate the source, especially if you think it is close to you or strong at you location, please send it or phone it to an officer of these clubs.



## INTERFERENCE COMMITTEE INFORMATION RECORD

Member Security Code: \_\_\_\_\_

Name \_\_\_\_\_ Call Sign \_\_\_\_\_ Class \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Home Phone: \_\_\_\_\_ (unlisted? \_\_\_\_\_) Work Phone: \_\_\_\_\_

Cellular Phone: \_\_\_\_\_ Other: \_\_\_\_\_

(State, Province, etc.) where you were born: \_\_\_\_\_ Year of birth: \_\_\_\_\_

Note: Information above is required for our verification process. IN ADDITION, YOU MUST ATTACH PHOTOCOPY OF YOUR AMATEUR AND/OR COMMERCIAL LICENSE(S). Information below is optional but helpful. Possibly all the information on this form may appear on a roster to be distributed back to members only. If there is any info you do not want listed, draw a circle around it.

Occupation: \_\_\_\_\_ at \_\_\_\_\_ hours: \_\_\_\_\_

Please list equipment capabilities you have in the range above 50 MHz by indicating quantity, and abbreviations: HT, TT(pad), FM, SSB, Mobile, Fixed, RePeaTeR, DopScan, Yagi, Direction Finder, etc.:

6 meters	
2 meters	
220 MHz	
445 MHz	
902 MHz	
1.2 GHz	

Please elaborate on your equipment and capabilities in the area of Packet radio, computers, database and word processing software, etc. as might pertain to processing direction finding (compass bearings etc.) information.

Please elaborate on your equipment and capabilities in the area of portable and mobile Spectrum Analyzers, Calibrated F.S. Meters, Freq. Counters, I-R Viewers "professional" experience and access to equipment in the areas of Graphic Arts, Electronic and/or Mechanical design, fabrication, and testing.

List Commercial FCC licenses; P.E. Registrations; Advanced Education (PhD., MD, LLB, etc.); Special Training and Certifications (IRS, FCC, FBI, CIA, NSA, Armed Forces, Police, SWAT, EMT, Martial Arts, Weapons, Alarms, Explosives).



HR ARRL BULLETIN NR 79 Fm ARRL Headquarters Newington CT.

October 14, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

A third party traffic agreement, effective July 18, 1986, has been signed between the United States and Sierra Leone, 9L. This permits U.S. amateurs to exchange messages on behalf of third parties with stations in Sierra Leone, subject to the limitations of Section 97.114 of the FCC rules. AR

HR ARRL BULLETIN NR 78 Fm ARRL Headquarters Newington CT

October 10, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

Beginning December 1, the Commission will allow reexamination credit for written elements passed during an otherwise unsuccessful amateur examination, according to an FCC news release October 9. Currently the Commission only allows credit for code examination elements. The FCC also clarified that examiners who administer a Novice examination are not required to issue a Certificate of Successful Completion of Examination, CSCE. Instead, applicants may produce a photocopy of a pending application which indicates the applicant has qualified for a novice license. These rule changes are contingent upon Office of Management and budget approval of revisions to FCC form 610. AR

HR ARRL BULLETIN NR 77 Fm ARRL Headquarters Newington CT

October 9, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

FCC has proposed authorizing additional CW frequencies between 7050 and 7075 Khz for Novices and Technicians in Hawaii, Alaska, Region 2 Pacific Insular areas and Caribbean Insular areas. HQ has received only the news release, not the actual proposal, so no further details are available at this time. Monitor W1AW for updates. AR

HR ARRL BULLETIN NR 76 Fm ARRL Headquarters Newington CT

October 9, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

FCC has denied a petition for rulemaking filed by ARRL requesting that FCC require labelling of home entertainment devices as to their RFI susceptibility. FCC said the petition failed to take into account the need to establish criteria or standards to permit a qualitative assessment of the RFI susceptibility of a home entertainment device. FCC said this problem was being addressed by an AD HOC committee instituted by the American National Standards Institute. FCC will continue to monitor the effectiveness of the efforts of the committee, and if voluntary efforts are not yielding an adequate degree of RFI susceptibility control within a reasonable time, it may then consider mandatory standards and a means of enforcing them. AR

HR ARRL BULLETIN NR 75 Fm ARRL Headquarters Newington CT

October 9, 1985 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

FCC has permanently authorized automatic control for packet stations transmitting third party traffic on VHF using AX25 protocol. This amendment to the amateur rules came in response to an ARRL petition for partial reconsideration filed last February. Although FCC acknowledged assurance of safeguards by the ARRL for the AX25 protocol, they noted that control operators capable of monitoring such transmission must alert the control operator of any intermediate retransmitting station under automatic control of any station misuse so the corrective action can be taken. FCC deferred action on requests for automatic control for digital communications on HF until its feasibility can be determined. AR



HR ARRL BULLETIN NR 74 Fm ARRL Headquarters Newington CT

October 8, 1986 - Relayed by KB8NW/OBS -

To all radio amateurs - BT

The ARRL has filed a petition for reconsideration with FCC requesting the Commission reverse its decision delegating to volunteer examiner coordinators the responsibility for maintaining the question pools for amateur written examination elements. The ARRL comments state that it was the intent of Congress that the FCC supervise the examination process through the maintenance of question pools, and that the Commissions maintenance of them is the only way to insure standardization among the 25 VECS. At least two other petitions for reconsideration have also been filed. AR

HR ARRL BULLETIN NR 73 Fm ARRL Headquarters Newington CT

October 7, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

With the change to Standard Time on October 26, all regularly scheduled W1AW code practice and bulletin transmissions will be one hour later in UTC. If you have been on Daylight time, continue to tune in W1AW at the same local times.

Keplerian data transmissions will be on Tuesdays and Saturdays at 2330 UTC on Baudot on the regular teleprinter frequencies. AR

HR ARRL BULLETIN NR 72 Fm ARRL Headquarters Newington CT

October 6, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

W4HHK reports reception of a third unidentified satellite at 2304.0 Mhz, beginning October 3 at 2205 UTC. Its Azimuth varies between 44 and 72 degrees, elevation was between 42 and 44 degrees. Continuous Pulse Modulation was heard. For more information contact: Paul Wilson, W4HHK, PO Box 73, Collierville, TN 38017. AR

HR ARRL BULLETIN NR 71 Fm ARRL Headquarters Newington CT

October 3, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

Congress has finished its work on the Electronic Communications Privacy Act of 1986 and sent it on to the White House. On October 2 the House concurred with the Senate text and adopted the Bill, HR 4952. It goes next to the President who is expected to sign it. Final version is said to be solidly supported by the Department of Justice. The Bill still creates an unwarranted expectation of privacy on the part of, for instance, Cellular Radio users, but penalties for a first offense of intentionally listening to that service have been dropped to a 500 dollar fine only. Scanner operators who heard protected communication and tune away from it without acquiring its content will not have violated the new law. Sections of the Bill about which amateurs were most concerned at the outset have been modified and it does not appear to inhibit amateur operation as such. AR

HR ARRL BULLETIN NR 70 Fm ARRL Headquarters Newington CT

October 2, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

WB5LUA and W4HHK report reception of an apparently new COSMOS Satellite on 2304 Mhz beginning October 2, 1986. This second satellite almost identically follows by 13 hours an earlier new Russian Bird that was reported in ARRL Bulletin 61. The first Satellite is being received for five hours beginning at sunrise. The second is heard in the evening with a maximum elevation of 16 degrees at the end of a pass. For more information contact: Paul Wilson, W4HHK, PO Box 73, Collierville, TN 38017 PHONE: 901 853 773 AR



HR ARRL BULLETIN NR 69 Fm ARRL Headquarters Newington CT

October 2, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

In celebration of United Nations day, 4U1UN in New York will be using the special callsign 4U41UN. This will be a one day only event for October 24, 1986. AR

HR ARRL BULLETIN NR 68 Fm ARRL Headquarters Newington CT

September 23, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

The FCC has dismissed a petition for rulemaking filed by Donald Stoner which sought to create a new Public Digital Radio Service in the 52 to 54 Mhz portion of the Six Meter amateur band. However, in doing so they may have created a new threat to the 902 to 928 Mhz amateur band. The Commission in its denial noted that the entire 50 to 54 Mhz band is allocated to the amateur radio service and ITU regulations do not provide the United States with any additional or alternative allocation which would permit a different type of service. The Commission also said that the reallocation of the 52 to 54 Mhz band to a new service would significantly and adversely affect existing amateur operations.

However, the Commission stated that their actions dismissing the Stoner petition should not discourage alternative proposals to establish a new computer hobbyist radio service. Computer hobbyists continue to assess various spectrum alternatives such as portions of the 902 to 928 Mhz frequency band, for this type of proposal.

The League lines column of November QST and the ARRL Letter will carry more detailed information. AR

HR ARRL BULLETIN NR 67 Fm ARRL Headquarters Newington CT

September 23, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

Canada and Japan have signed a reciprocal operating agreement effective November 16, 1986. This will be the third reciprocal agreement that the Japanese Government has entered into, the other two being with the United States and the Federal Republic of Germany.

Information concerning U.S. or Canadian reciprocity is available from the ARRL or CRRL HQ, or from the JARL Secretariat, 1 14 2 Sugamo, Toshima, Tokyo 170, Japan.

Amateurs operating in Japan under a reciprocal licensing agreement receive a 7J call sign such as 7J1AAA in Tokyo or 7J3AAA in Osaka. AR

HR ARRL BULLETIN NR 66 Fm ARRL Headquarters Newington CT

September 19, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

Late JAS 1 information received from JARL reports that the Linear Transponder JTA will stop on Friday and Monday each week to recover battery voltage and to prepare the digital system. The digital system is expected to be available by the end of October or Later. AR

#### FOR SALE

California DopplerScant parts. Includes 2 sets of IC's, Pin Diodes, LED board wired. Instructions. Best offer. Call Tom Rudman KD8EX at 933-8753 (Avon Lake, Ohio).

Swan 350C 10 thru 80 Meters. \$150 includes Power Supply/Speaker. Contact: Larry KA8WRZ at 476-8164 after 4:00 PM.

#### STORAGE SPACE WANTED

Absolute dry storage space for a 1984 Gold Wing Asincade. This would be about the same space required to store a small car. Contact Charlie KA8EVS: 441-4568 after 6 PM.



EXCERPTS FM HR DX BULLETINS fm ARRL Headquarters, Newington CT  
Relayed by KB8NW/OBS via BARF80 BBS

#41 (Oct 17) K1XM, Southern New England DX Assoc. & The Yankee Clipper Contest Club.

CHRISTMAS ISLAND Ron, ZL1AMO, continues to be active from VK9XI thru Oct 20. Rumors that he left last week are apparently false, as he has been reported on 7011 Khz at 1100Z and 14027 Khz at 1500Z.

MINAMI TOROSHIMA 7J1ACH has been active on several bands, including 40 M, 7001 Khz at 1130Z, working Eastern U.S. He has also been reported to have a 160M Ant. installed.

DIEGO GARCIA VQ9QM has been very active on 3512 Khz at 2340Z, on 7003 Khz at 2330Z and 21023 Khz at 1430Z. VQ9GB has also been active on 7003 Khz at 2330Z and 21028 Khz at 1730Z and 1530Z.

GALAPAGOS The HD8G operation produced about 6500 QSOs. QSL to KT1N. The Galapagos DX Club plans multi single operation during CQ WW PH contest using HC8DX.

TANZANIA 5H3ZO is still active on 14024 Khz at 1430Z and 21025 Khz at 1650Z. On phone, 5H3RB has been on 21247 Khz at 1900Z.

TRINDADE A brief expedition to Trindade took place signing PY1DFF/PY0T and PY2RRA/PY0T. QSL to PY1DFF.

ZAMBIA 9J2BO has been active on 21335 Khz at 1755Z and on 7002 Khz AT 0430Z.

FRANZ JOSEF LAND UV100 very active on 40M about 1200Z, lower 10 Khz of band.

ARGENTINA Expedition to Trinidad Is., Argentina, signing AZ1D will take place Oct 20 to 25. Bands 80 thru 10, SSB & CW will be used. There will also be activity on 6 & 2 M.

CAMEROON TJ1AP has been worked on 14010 Khz at 1730Z. QSL to IK8DYD

#40 (Oct 10) W9NUF & The Northern Illinois DX ASSOCIATION.

CHINA John, K9KA will be in China Oct 11 to 22. Plans to operate BY1PK fm 2300 to 0100Z daily, & fm BY1QH fm 1100 to 1400Z. Watch 14120 & 14160 Khz. QSL via K9KA.

CHRISTMAS ISLAND Ron, ZL1AMO, continues to be very active from VK9XL. He has been worked daily on 7 Mhz between 1030 and 1300Z between 7000 and 7011 Khz. He has also been worked on 3799 Khz at 1030Z and on 14026 Khz at 1345Z. QSL via ZL1AMO.

MAURITIUS Lloyd and Iris Calvin will begin their next DXpedition in October from 3B8. They will also operate from other locations in the Indian Ocean area. QSL via YASME.

PALMYRA ISLAND A very brief 14 Mhz SSB operation signing KB1HM/KH5 occurred on September 30.

SOUTH SHETLAND CX0XY is expected on for two weeks from the South Shetlands beginning in Mid October. The operation will be mostly SSB.

COLOMBIA An expedition to Gorgona Island will operate 5J0FRC on all bands, 160 through 10 Meters, on Oct 11 and 12. QSL to FRACOL, PO Box 1767, Bogota, Colombia, S.A.

LUXEMBOURG G0DKN and a group of Netherlands amateurs will operate, using their own calls /LX, thru Oct 13. All bands, 160 thru 10 Meters, both SSB and CW, will be used.

#39 (Oct 3) KA2VYW and The Western New York DX Association

MARCUS ISLAND 7J1ACH expected to be active around Mid Oct on 40 & 20 M RTTY.

BRUNEI Check 20 Meters for C85DQ on Sundays about 1200Z.

CAMPBELL ISLANDS ZL9AFH is rumored to being active soon.

TANZANIA KC7UU has been operating from 5H3ZO on 14026 Khz.

NIUE ISLAND ZK2JB with ZK1CG are active on 20 Meters.

BOTSWANA To commemorate the 20th anniversary of the Independence of Botswana, amateurs from this country will be using call signs beginning with 802 for Full license holders and 800 for Novice license holders during October.

GOUGH ISLAND ZS6BUR reports that ZS6AEN will be QRV from Gough Island during October. The call sign may be ZD9GI, but he is not sure at this time. He will be on HF, possibly on the Pacific Net on 14.144, and some Satellite operation is expected.



HR PROPAGATION FORECAST BULLETIN NR 41 Fm ARRL Headquarters Newington CT,  
October 13, 1986 - Relayed by KB8NW/OBS via BARF80 BBS

To all radio amateurs - BT

Information bulletins on the state of the sun and the earth's magnetic field came back on WWV last week. The news is mostly good. The solar flux reached 76 on October 12, the highest figure since last spring. This means noticeably higher MUF than we have experienced in several months, a condition that shows in the propagation charts given monthly in QST. They also show the 10 Meter band opening at least briefly to many points in the southern hemisphere during late October and early November. The 21 Mhz band has even been good to southern and central Europe recently at the writers Florida location, and it should get better in early November.

The latter part of October may be rather poor in the high latitudes, as the result of the return of active areas of the sun that brought low signal levels and severe fading through much of the middle third of September.

Several small sunspots, presumably of the new cycle, have been seen recently by amateur observers. This is normal for up to a year before the old cycle gives way to the new, but cycle 21 is quite obviously running out of gas.

American sunspot numbers for October 2 through 8 were between 10 and 19 with a mean of 15.6. AR

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### Calling All Young Artists

If you're an artist between the ages of 8 and 18 and have an interest in electronics, here's an opportunity you won't want to miss. We'd like you to showcase your talent and originality in our national art contest. And, if your entry is one of the winners, your artwork will be forwarded to a worldwide contest for judging. Our contest features awards along with the possibility of national and international recognition for you.

The ARRL is sponsoring a national art contest with the theme "Youth in Amateur Radio." It is a wide-open theme, which allows you to use your imagination in the following mediums: photographs, drawings, paintings and other illustrations (excluding written text). You choose the medium; all we ask is that no artwork be larger than 11 x 14 inches.

There are three age categories, and a first, second and third prize will be awarded for each one. They are: Group 1—ages 8-12, Group 2—ages 13-15, Group 3—ages 16-18. Forthcoming issues of QST will announce winning entries and awards. Winning entries and other

entries deemed appropriate will be forwarded to the "Youth in Electronics" contest being sponsored by the International Telecommunication Union, Geneva, Switzerland.

Every contest needs some rules:

- All entries must be received at ARRL HQ no later than February 1, 1987.
- Entrants must be League members or be sponsored by a League member. (If you don't know any members, write to ARRL for a list of possible sponsors.)
- Each entry must be accompanied by a completed application form (available from ARRL).
- Each entry must be the original creation of the entrant.
- Entries become the property of ARRL, and cannot be returned.
- Artwork must be no larger than 11 x 14 inches.

We're looking for your impression of Amateur Radio—any way you see it. Send for an application today to American Radio Relay League, Dept Y, 225 Main St, Newington, CT 06111.

Good luck in the contest!

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### VEC's to Maintain Question Pools

The FCC will no longer involve itself in maintaining the pools of questions for Amateur Radio examinations. Acting in PR Docket 85-196, it has amended Part 97 to permit Volunteer Examiner Coordinators (VECs) to maintain the pools of questions. The effective date of these rule amendments will be announced in a future FCC public notice.

This FCC action is contrary to the ARRL's position. The League, in its formal comments, urged the FCC to continue to maintain question pools to ensure a single, high quality pool of questions for each examination element. Since there are numerous VECs, a number of different question pools could evolve, which would differ in quality, consistency and difficulty. The FCC partially disagreed, saying that there had been a high degree of standardization in the examinations which had been brought about through mutual cooperation of the VECs. Furthermore, "VECs are capable of satisfactorily performing the task and are in the best position to do it in their role as coordinators." However, the Commission agreed that the matter of standardization was important, and stated that the standards and algorithm used by the Commission to assemble the question pools would be codified in the rules. The Commission noted that VECs may continue to use the FCC question pools for the time being. However, the Commission also noted that it does not intend that the pools remain static but they "should track the dynamism in Amateur Radio technology."

Transferring the question pools to the VECs results in the deletion of PR Bulletins 1035A, B, C, and D which contain the question pools for each license class. Since FCC rules now specify the scope of the written examination for each element, the topics and percentage of questions that should be selected for each element topic, PR Bulletin 1035, the study guide for FCC Amateur Radio license examinations, is also eliminated.

This FCC action is a further step in what it calls the privatization of examination functions of the Amateur Radio Service. "Happenings", October QST, will carry the exact Part 97 changes. Copies of the Report and Order are available from HQ for an SASE plus 3 units of first-class postage.

### Fuji Satellite Launched

The JAS-1 satellite, now called "Fuji", has reached its planned circular orbit. The time of "birth" was 21 hours, 47 minutes 07 seconds UTC on August 12.

The following are the Fuji operating frequencies:

Mode JA uplink: 145.900 to 146.000 MHz

Mode JA downlink: 435.900 to 435.800 MHz (Inverting transponder)

Operating frequencies for mode JA, the Mode J analog mode for SSB and CW, may be determined as follows. The sum of the uplink and downlink frequencies equals 581.800 MHz exclusive of Doppler shift. For example, if the uplink is 145.920 MHz, the downlink will be 435.880 MHz. Conversely, if the downlink is to be 435.810 MHz, the uplink should be set for 145.990 MHz. In both these examples, the sum of the uplink and downlink equals 581.800 MHz.

The beacon is now operational on 435.795 MHz, sending 20 WPM CW telemetry.

Mode JD, the digital mode J, will be activated in several weeks. The Mode J Analog Transponder is now available for use. Amateurs are requested to use the minimum power necessary.



### Commission Proposes Automatic Transmitter Identification

The Commission has proposed establishing an automatic transmitter identification system (ATIS) signal on all satellite video uplinks and asked for comments on an ATIS system for all services and radio transmitting devices in Gen. Docket 86-337.

ATIS is a unique, unchangeable identifying number assigned to each transmitter at the time of manufacture, plus some correlation of the number to a data base identifying the licensee. This signature is automatically added to the unit's transmission and provides positive identification of each radiated signal.

The Commission pointed out the urgent need for an automatic identification on satellite uplinks, especially in the wake of the recent "Captain Midnight" episode, where an operator using a powerful transmitter overrode the programming of Home Box Office to insert his own brief message seen by viewers in various parts of the country. Since traditional search methods used to identify and resolve interference sources on terrestrial systems are ineffective on satellite systems, ATIS would provide an effective identifier to help cope with increasing unintentional and intentional interference. All regulated video satellite uplinks would be required to include ATIS on their radiated signal after December 31, 1987.

### Spectrum Allocated for Mobile, Cellular Radio and Mobile Satellite

In an unrelated set of decisions, the Commission allocated spectrum for the mobile, cellular radio and mobile satellite services. Specifically, the actions are as follows:

- Authorized 10 MHz of additional spectrum for Private Land Mobile use by making available the 896-901 and 935-940 MHz bands to accommodate entities other than safety;
- Allocated two megahertz - 901-902 and 940-941 - for a new General Purpose Mobile Radio Service accessible to all mobile users;
- Allocated an additional 10 MHz of spectrum for use by cellular radio systems: the 824-825, 845-846.5, 869-870 and 890-891.5 MHz bands for nonwireline carriers and the 846.5-849 and 891.5-894 MHz bands for wireline carriers, thus allowing each type of carrier a total of 25 MHz.
- Allocated 27 MHz in the L-band — 1545-1559 and 1646.5-1660.5 MHz — of the Aeronautical Mobile-Satellite Service to the Mobile Satellite Service.
- Also, 6 MHz in the UHF band - 821-824 and 866-869 — were allocated to private land mobile for public safety entities.

In authorizing additional spectrum for Private Land Mobile Radio Services other than public safety, the Commission noted that the 10 MHz in the 896-901/935-940 MHz bands would be divided among three pools as follows: 5 MHz for Specialized Mobile Radio (SMR) systems, 2.5 MHz for Industrial and Land Transportation Radio Services and 2.5 MHz for the Business Radio Service.

Interpool sharing among the three will start 36 months after the first radio system license is granted in this band. The FCC also adopted a 12.5 kHz channeling plan with provision of technical flexibility for the 896-901 and 935-940 bands.

### Italian Robot/Beacon Station

Robot station IY4M is now operating on 28195 kHz with either 20 or 2 watts output to a ground plane antenna. To contact IY4M, listen for the beacon sending IY4M ROBOT QRV. Send your call twice, being careful not to leave any extra space between characters. If the Robot hears you, it will ask for a signal report, then send you a report and a greeting in English or one of several other languages.



THE ARRL LETTER, Vol 5, No 17, Aug 15, 86 via HamNet/CompuServe/W3VS via BARF80 BBS

#### Amateur 902-928 MHz Limitations Clarified

The Commission has clarified certain frequency privileges and power limitations on the use of the 902-928 MHz frequency band by amateur operators.

The action partially granted a petition for reconsideration filed by David B. Popkin, W2CC.

Specifically, the FCC amended Section 97.67(i) of the rules. While no amateur station transmissions are now permitted on 902-928 MHz within 150 miles of the White Sands Missile Range, reduced power transmissions (at 50 watts peak envelope output power) are permitted between 150 and 200 miles from the boundaries of White Sands Missile Range. The FCC also amended Sections 97.7(g)(8) and (9) to clarify that the secondary status of Amateur Radio does not bear any relation to certain geographic areas of prohibited operation on the 902-928 MHz band. Additionally, the FCC clarified that pulse emissions by amateur stations are permitted in the 902-928 MHz band.

These rules become effective 0001 UTC October 4, 1986. October QST's "Happenings" column will carry the specific rule changes.

#### ARRL Files Comments in RF Lighting Devices Docket

The ARRL has filed comments regarding the FCC proposal to impose radiation limits on radio frequency (RF) lighting devices operating below 30 MHz. This is to ensure that these devices do not interfere with other radio services, including the Amateur Service. RF lighting is a new technology in which RF energy is used to produce light, apparently more efficiently than existing light bulbs. RF bulbs are incidental radiation devices, to the extent that a portion of the RF energy escapes into space, with a potential for causing interference.

In 1983, the ARRL lab conducted tests on several of these bulbs which showed interference signal strengths from S1 to S7 on frequencies from 63 kHz to 7300 kHz with the receiver using an indoor antenna 3 feet from the RF bulb. The ARRL points out in its comments that it believes that the radiation levels of the bulbs tested are considerably less than those maximum levels proposed by the Commission in the proposal. In its comments, the ARRL suggests that the Commission encourage the private sector to produce an adequate set of standards, and that the bulbs carry labels which would educate consumers about the potential of interference.

#### THE W5YI REPORT - Dits & Bits, Vol 8 #18, 9/15/86

HamNet Electronic Edition, CompuServe's Amateur Radio SIG via BARF80 BBS

#### FCC Issues New RFI Handbook

The Field Operations Bureau, FCC, has just released a new Interference Handbook. It is the best ever! Written by the Staff of their Public Service Division, the manual identifies sources of interference to home entertainment equipment and recommends an appropriate solution.

Covered is interference involving two-way transmitters, television, computers, paging systems, VCR's, TV booster amplifiers, telephones, electronic organs, AM/FM radios, stereo-hi-fi equipment as well as electrical power and power line RFI.

A chapter lists dozens of manufacturers of consumer electronics and what each will do to assist the public with RFI problems involving their equipment. Performance ratings of low-pass, high-pass, power line and other filters are also given.

Step-by-step transmitter (and television) modification instructions advise qualified technicians how to evict RF interference. An interference check list tells amateur operators what to do when they get a report of TVI.

The 64-page full-color handbook will be available at all FCC Field Offices shortly. It is must reading for every ham operator!



October 20, 1986

North Coast Amateur Radio Club  
General Membership Roster

	<u>Call</u>	<u>CL</u>	<u>Name</u>	<u>Street Address</u>	<u>City and State</u>	<u>Telephone</u>
001.	KB8A	E	Dan Sarama	15591 Rademaker Blvd.	Brook Park, OH 44142	267-5083
002.	K8AAI	G	Bob Turek	2150 W. 105th St.	Cleveland, OH 44102	- UL
003.	WBADV	G	Martin (Ray) Smith	16927 Chatfield Ave.	Cleveland, OH 44111	252-6151
004.	WL7AEC	G	Tom Tetzlaff	5341 Cornell Ave.	N. Ridgeville, OH 44039	1-327-6020
005.	N9AGC	A	Greg Smith	5115 Lake Rd., Apt. 1019	Sheffield Lake, OH 44054	1-949-8545
006.	WD8AJF	A	Dan Wadsworth	11028 Hawke Rd.	Columbia Station, OH 44028	1-748-2816
007.*	KB8AK	A	Pat Willemin	331 Courtland St.	Elyria, OH 44035	1-324-4574
008.	N8API	T	George Keco	P.O. Box 442	Brunswick, OH 44212	225-8709
009.	N8ATV	A	Jerry Jarze	-----	-----	-----
010.	N8AUH	G	Dave Kersten	2197 McKinley Ave.	Lakewood, OH 44107	221-6740
011.	K8AZ	E	Tom Lee	7275 Surrey Lane	Chesterland, OH 44026	729-8104
012.	WA8AZO	G	Joe Trost	412 Douglas Blvd.	Richmond Hts., OH 44143	481-7683
013.	W1BBW	G	Shelly Shillingburg	667 Washington Ave.	Barberton, OH 44203	1-753-9314
014.	KA8BJA	A	Frank Stevison	32137 Dickerson Rd.	Willowick, OH 44094	944-4843
015.	W1BKZ	E	Pete Harmon	35400 Euclid Ave. #A-204	Willoughby, OH 44094	951-9360
016.	KE8BN	A	Mark Dunkel	550 Kenilworth Rd.	Bay Village, OH 44140	835-3372
017.	N8BO	E	Charlie Cook	2792 Friar Dr.	Parma, OH 44134	842-4232 UL
018.	WB8BPA	G	Don Hill	2005 Marlindale Rd.	Cleveland Hts., OH 44118	932-8050
019.	KA8BPU	G	Ray Becker	5911 Bradley Ave.	Parma, OH 44129	842-7647
020.	N8BTB	A	Steve Stevison	14106 Terminal Ave.	Cleveland, OH 44135	476-2939
021.	K8BVI	A	Art Anzic	28491 Elder Dr.	North Olmsted, OH 44070	235-4077
022.	N8BYW	G	Bud Riess	317 Sheri Ln.	Brunswick, OH 44212	225-7417
023.	AE8C	E	Sy Maruszán	4207 Kenmore Ave.	Parma, OH 44134	886-3712
024.	W8CEJ	A	Mel Hoffman	5579 Nathan Ave.	Parma, OH 44130	885-3303
025.	W8CEM	A	Chuck Perry	2833 Walter Rd.	North Olmsted, OH 44070	777-3157
026.	W8CHA	G	Steve Molnar	15721 Westdale Ave.	Cleveland, OH 44135	252-7019
027.	WD8CHL	T	Jim Barbour	5717 S. Nantucket #211	Lorain, OH 44053	1-282-3044
028.	KB8CI	A	Tom Kryza	10620 Fidelity Ave.	Cleveland, OH 44111	671-7199
029.	N8CKV	A	Paul Langendorfer	7784 Columbia Rd.	Olmsted Falls, OH 44138	235-1458
030.	KA8CKZ	A	Bill Jones	11313 Linnet Ave.	Cleveland, OH 44111	941-3850 UL
031.	N8CQD	G	Bill Maerkle	22940 Mastick Rd.	Fairview Park, OH 44126	779-7311
032.	KE8CT	A	Pete Incaini	8175 Royal Ridge Dr.	Parma, OH 44129	885-5436
033.*	WA8CTU	G	Al Trost	412 Douglas Blvd.	Richmond Hts., OH 44143	481-7683
034.	N8DAD	T	Barbara Ernest	12313 Kensington Ave.	Cleveland, OH 44111	941-2271
035.	K8DBG	T	Dick W. Stuart	4498 Briarbanks Dr.	Fairview Park, OH 44126	331-8591
036.	K8DBN	E	Bill Rieke	1440 E. Melrose	Westlake, OH 44145	333-6644
037.	K8DDY	G	Bill Schreiber	6 Sunrise Blvd.	Olmsted Twp., OH 44138	235-3913
038.*	KE8DJ	A	Diane Willemin	331 Courtland St.	Elyria, OH 44035	1-324-4574
039.	N8DMK	E	Russ Pratley	12711 Broadway	Garfield Hts., OH 44125	- UL
040.	K8DTS	A	Bob Leskovec	25884 Highland Rd.	Richmond Hts., OH 44143	486-5833 UL
041.	WB8DTY	A	Tommie Murray	P.O. Box 08097	Cleveland, OH 44108	486-0033
042.	KE8DX	A	Dick Foster	6817 Franke Rd.	Middleburg Hts., OH 44130	676-0165
043.	WA8DYL	G	Eugene Likes	4162 Canterbury Rd.	North Olmsted, OH 44070	734-7648 UL
044.	KB8DZ	A	Joe Noga	36171 Kinzel Rd.	Avon, OH 44011	1-934-6291
045.	N8DZO	T	Jack Zigon	P.O. Box 347001	Parma, OH 44134	351-2427
046.	W8EFW	E	Paul Cornell	1340 Ford Rd.	Lyndhurst, OH 44124	442-7024
047.	N8EIJ	G	Ken Poling	4707 Martin Dr.	North Olmsted, OH 44070	777-8785



048.	W8EPM	T	Joe Rozek	28405 North Park Dr.	North Olmsted, OH 44070	777-5574	
049.	KD8EQ	A	Dick S. Stuart	26921 Elizabeth Ln.	Olmsted Twp., OH 44138	235-2323	
050.	WA8ERA	T	Lee Georgia	5106 Montauk Ave.	Parma, OH 44134	888-5286	UL
051.	W8ETC	G	Len Hettinger	3087 W. 115th St.	Cleveland, OH 44111	251-5936	
052.	N8ETP	T	Tom Kopcak	1497 Canterbury Rd.	Westlake, OH 44145	871-6181	UL
053.	N8ETQ	A	Dan Harlan	3418 Stanfield Dr.	Parma, OH 44134	845-5442	
054.	N8ETW	G	Ernie Nagy	35892 Poplar St.	North Ridgeville, OH 44039	1-327-6849	
055.	N8ETY	A	Dave Kifer	260 Japonica Ave.	Camarillo, CA. 93010	1-805-482-7462	
056.*	N8ETZ	A	Mary Nagy	35892 Poplar St.	North Ridgeville, OH 44039	1-327-6849	
057.	KA8EVS	G	Charlie Stien	4652 East 85th St.	Garfield Hts., OH 44125	-	UL
058.	KD8EX	A	Tom Rudman	32651 Redwood Blvd.	Avon Lake, OH 44012	1-933-8753	
059.	KC8F	E	Heinz Wimmer	26976 Fairfax Lane	North Olmsted, OH 44070	734-6890	
060.	W8FAZ	E	Joe Zelle	1227 Addison Rd.	Cleveland, OH 44103	431-6437	
061.	N8FCX	A	Ron Packard	4931 Wake Robin Rd.	Mentor, OH 44060	1-257-2541	
062.	N8FDY	A	Tom Wilkinson	1337 Sloane Ave.	Lakewood, OH 44107	521-9519	
063.	N8FEG		Pete Gramuglia	6380 Elmdale	Brook Park, OH 44142	676-9027	
064.	N8FGR	T	Wayne Pipoly	8775 Contee Rd., Apt 203	Laurel, MD 20708	1-301-490-9708	
065.	N8FIL	T	Rich James	7620 Crestwood Ln.	Northfield Center, OH 44067	467-0493	UL
066.	N8FKS	T	Don Summer	26915 Westwood Ln.	Olmsted Twp., OH 44138	235-6295	
067.	N8FKT	A	Bob Bassett	P.O. Box 07128	Lakewood, OH 44107	228-3788	UL
068.*	KA8FOE	T	Pauline Wells	5955 Burns Rd.	North Olmsted, OH 44070	779-8999	
069.	WA8FOV	G	Ted Ermi	25895 John Rd.	Olmsted Twp., OH 44138	235-2698	
070.	N8FQQ	T	Tom Adams	11400 Linnet Ave.	Cleveland, OH 44111	251-3080	
071.	N8GJR	A	Jim Nestor	39114 Route 303	Grafton, OH 44044	1-355-8697	
072.	W8GNB	G	Ed Ehrbar	4307 W. 137 St.	Cleveland, OH 44135	251-8234	
073.	N8GNJ	T	Steve Stroh	917 Salem Ave.	Elyria, OH 44035	1-365-2793	
074.	N8GNL		John Jailer	5685 Hickory Trail	North Ridgeville, OH 44039	1-327-7088	
075.*	HR3GS	I	Gladis Shillingburg	667 Washington Ave.	Barberton, OH 44203	1-753-9314	
076.	WA8GZC	T	Marion Hill	8384 Barton Dr.	Strongsville, OH 44136	238-1152	
077.	N8HAD	T	Skip Hockensmith	6229 Elmdale	Brook Park, OH 44142	267-9374	
078.	N8HHE	T	Rob Szule	6032 Porter Rd.	North Olmsted, OH 44070	734-5963	
079.	N8HOB	G	Paul Hoegstrom	5962 S. Park Blvd.	Parma, OH 44134	884-8398	
080.*	N8HPV	T	Elizabeth Nagy	35892 Poplar St.	North Ridgeville, OH 44039	1-327-6849	
081.*	N8HSE	T	Nan Kersten	2197 McKinley Ave.	Lakewood, OH 44107	221-6740	
082.*	N8HTX	T	Monica James	7620 Crestwood Ln.	Northfield Center, OH 44067	467-0493	UL
083.	N8HUR	T	Carl Beduhn	14411 Tabor Ave.	Maple Heights, OH 44137	663-8376	UL
084.	N8HVQ	T	Jack Andrisin	7730 Flegler Dr.	Parma, OH 44134	845-0068	
085.	W3IGI	T	Bill Spring	389 Brantley Ln.	Brunswick, OH 44212	273-5723	
086.	W7IJ	E	Bill Rohrer	2235 Elmwood Dr.	Westlake, OH 44145	892-9472	
087.	KA8IMU	A	Tony Romano	4837 E. 84th St.	Garfield Hts., OH 44125	271-6954	
088.	WD8INK	G	Ken Wiggenghorn	2134 Brown Rd.	Lakewood, OH 44107	221-9954	
089.	WD8INO	G	Steve Ferraro Jr.	3417 Marmore Ave.	Parma, OH 44134	741-2547	
090.	W8IO	E	Robert Allen	23305 Westchester Dr.	North Olmsted, OH 44070	734-0570	
091.	WD8IQO	T	Milt Kujawinski	4235 W. 50th St.	Cleveland, OH 44144	749-5519	
092.	WD8IRG	A	Van Winkle	16417 Shelby Dr.	Brook Park, OH 44142	267-9063	
093.	WD8ISB	E	Dick Dell	8085 Wren Dr.	Macedonia, OH 44056	467-7733	UL
094.	KROJ	E	Jeff Vecbastiks	3289 W. 41 St.	Cleveland, OH 44109	631-6087	UL
095.	N6JAM	T	Ron Lew	512 Trebisky Rd.	Richmond Hts., OH 44143	486-7027	
096.	WD8JMM	G	Alex Manuk	3125 West 11th Place	Cleveland, OH 44109	-	
097.	KD8JQ	E	Don Jason	715 Twin Oaks Blvd.	Medina, OH 44256	1-723-5492	
098.	W8KGA	G	Larry J. Stacik	12503 Carrington Ave.	Cleveland, OH 44135	941-4711	
099.	WD8KHU	T	Mark Woodworth	20239 Bonnie Bank Blvd.	Rocky River, OH 44116	331-6347	



100.	KC8KI	A	John Baddour	2801 Clague Rd.	North Olmsted, OH 44070	734-3778
101.*	WD8KTC	T	Marie Johnson	6504 Edgehurst Dr.	Brook Park, OH 44142	676-5342
102.	KA8LIH	T	Karen Counter	22420 Morton Ave. Apt #4	Fairview Park, OH 44126	777-0670
103.	N8LL	E	Jim Schwabe	3050 Farnham Rd.	Richfield, OH 44286	1-659-9841
104.	WD8LRZ	G	Larry Lanning	3528 Monte Vista Dr.	Brunswick, OH 44212	225-4607
105.	AI8M	E	Dave Willemin	331 Courtland St.	Elyria, OH 44035	1-324-4574
106.	KV8M	E	Tom Kapsar	15517 Prospect Rd.	Strongsville, OH 44136	238-6150
107.	NO8M	E	Steve Wolf	27132 Butternut Ridge Rd.	North Olmsted, OH 44070	777-1177
108.	K8MBZ	A	Dave Jones	7630 Main St.	Olmsted Falls, OH 44138	235-3269
109.	K8MDC	T	Fred Jones	8174 Olmway Ave.	Olmsted Falls, OH 44138	235-3260
110.	K8MGH	G	Lou Pierce	6344 Ridgeview Blvd.	N. Ridgeville, OH 44039	1-327-2206
111.	WD8MHL	T	Ray G. Maskow	10401 Linnet Ave.	Cleveland, OH 44111	671-0317
112.	WD8MHR	A	Eric Benedict	6423 Ridge Rd. Apt. #5	Parma, OH 44129	888-6435
113.	K8MO	E	Jeff Safran	17781 Walnut Dr.	Strongsville, OH 44136	572-3509 UL
114.	W8MW	E	Maynard Weston	4564 Park Edge Dr.	Fairview Park, OH 44126	734-4260
115.	WB8NAQ	A	William Reed	3334 Brookdale Ave.	Parma, OH 44134	741-7071 UL
116.	WA8NXT	G	Ferd Nye Jr.	31497 Hilliard Blvd.	Westlake, OH 44145	871-8098
117.	WB8NXT	A	Neil Johnson	6504 Edgehurst Dr.	Brook Park, OH 44142	676-5342
118.	WD8OCI	T	Bob Bentley	4800 Henry St. Apt. #103	Garfield Hts., OH 44125	581-7303 UL
119.	WD8OMW	A	Glenn Christman	1295 Summit Ave.	Lakewood, OH 44107	221-6538
120.	K80PV	T	George Hodapp	13101 Yager Dr.	Strongsville, OH 44136	238-7663
121.	N40SD	T	Chuck Sommer	-----	-----	-----
122.	WD8OYO	A	Dave Ernest	4223 Columbia Rd.	North Olmsted, OH 44070	777-3694
123.	WD8PAQ	A	Bob Gromen	17800 Marks Rd.	Columbia Sta., OH 44028	238-0977
124.	KA8PEF	G	Joe Liszeski	8233 Avon Belden Rd.	N. Ridgeville, OH 44039	1-327-7938 UL
125.	W8PEV	G	Jim Malone	31235 Avon Rd.	Westlake, OH 44145	835-1206 UL
126.	WA8PJK	G	Paul Kohanski	1146 E. 76th St.	Cleveland, OH 44103-2004	391-0241
127.	K8PPZ	A	Tom Wisnor	27869 Sherwood Dr.	Westlake, OH, OH 44145	835-2288
128.	WD8QAC		Al Dalglish	26919 Westwood Ln.	Olmsted Falls, OH 44138	235-3771
129.	K8QNK	A	Dick Scheuering	4867 Summerlane	Brooklyn, OH 44144	741-7121
130.	KA8QQQ	G	Larry Kominek	20349 Marian Ln.	Rocky River, OH 44116	333-9943
131.	K8RBV	A	Bob Morgan	376 East 329th St.	Willowick, OH 44094	943-6374
132.	WB8RGK	G	Tim O'Reilly	5515 Thornton Dr.	Parma, OH 44129	888-5618
133.	K8RSH	A	Chuck Early	5943 Burns Rd.	North Olmsted, OH 44070	777-1595
134.	K8RWR	T	John Pearl Jr.	5709 Northcliff Ave.	Cleveland, OH 44144	749-0759
135.	K8RZP	G	John Pastor	322 Berea St.	Berea, OH 44017	234-4299
136.	K8SCI	A	Rick Wells	5955 Burns Rd.	North Olmsted, OH 44070	779-8999
137.	WD8SDP	T	Lin Shaw	7780 Lewis Rd.	Olmsted Falls, OH 44138	235-3912
138.*	KA8SLX	T	Chris Tetzlaff	5341 Cornell Ave.	N. Ridgeville, OH 44039	1-327-6020
139.	WA8SNI	G	Charlie Kontras	13709 Wainstead Ave.	Cleveland, OH 44111	252-2367
140.*	KA8SNM	T	Cheri Collins	35400 Euclid Ave. #A-204	Willoughby, OH 44094	951-9360
141.	K9SSL	E	Mike Walker	1204 Tulip Ct.	Brunswick, OH 44212	225-1744 UL
142.	KA8SYT	T	John Sopko	2100 Hancock St.	Lorain, OH 44052	1-288-0390 UL
143.	NR8T	E	Tim Hitesman	356 Bradley Rd.	Bay Village, OH 44140	871-3055 UL
144.*	KA8THY	N	Edna Lorenz	P O Box 147	Clinton, OH 44216	1-882-3315
145.*	K8TKQ	T	Howard Wells	5955 Burns Rd.	North Olmsted, OH 44070	779-8999
146.	WA8TMK	A	Fred Helwig Jr.	26045 Akins Rd.	Columbia Sta., OH 44028	236-3477
147.	KA8TQR	G	Dennis Minnick	1700 Brookdale Ave.	Parma, OH 44134	749-2365
148.	KB8TT	A	Dave Curry	887 E. 331st St.	Eastlake, OH 44094	942-5030 UL
149.	K8TTZ	G	Bob Mills	6716 Bonna Ave.	Cleveland, OH 44103	431-9492
150.	WB8UDA	A	Fred S. Szabo	6142 Eavenson Blvd.	Brook Park, OH 44142	-
151.	KA8UFN	T	Ollie Bell-Bey	13513 Cranwood Park Blvd.	Garfield Hts., OH 44125-1822	475-7886



152.	K8UHX	A	J D Csicsila	146 River Rd.	Hinckley, OH 44233	278-7904	
153.	K8UID	G	Ron Diehl	40171 Jones Rd.	Wellington, OH 44090	1-647-3664	
154.	WB8UPA	A	Russ Saepic	1861 Frost Circle	Brunswick, OH 44212	-	UL
155.	K8UTE	T	Basil L. Andrejko	19307 Maplewood St.	Cleveland, OH 44135	267-3433	
156.	KA8VDU	T	Al Prinz	1743 Lares Lane	Brunswick, OH 44212	273-1914	
157.	K8VJG	A	Ron Borkey Sr.	10699 Ridge Rd.	North Royalton, OH 44133	237-6718	
158.	KA8VYN	G	Steve Elder	18317 Walnut Dr.	Strongsville, OH 44136	238-9319	
159.	KA8WAR	T	Joe Kluha	12954 Sprague Rd.	Parma, OH 44130	888-4617	
160.	KA8WCK		Roy Glassco	4503 Azalea Lane	North Olmsted, OH 44070	779-1262	
161.	KA8WHK	T	Ralph Scott	5965 Olive St.	North Ridgeville, OH 44039	1-327-0037	UL
162.	KA8WJH	A	Joe Walker	3116 Becket Rd.	Cleveland, OH 44120	491-8040	
163.	K8WNE	G	George Vivian	25190 Deerfield Dr.	North Olmsted, OH 44070	777-6039	
164.	KA8WQN	T	Evelyn Godwin	882 Oelley Dr.	Cleveland, OH 44109	351-2463	
165.	KA8WRZ	T	Larry E. Tews	3341 W. 131 St.	Cleveland, OH 44111	476-8164	
166.	WBWXR	A	Roger Burgess	441 Bradley Rd.y Rd.	Garfield Hts., OH 44125	835-8739	
167.	AE8X	E	Jim Hartland	6506 Gilbert Ave.	Parma, OH 44129	842-4137	
168.	AJ8Y	E	Dennis Chaney	27697 Bryandale	Westlake, OH 44145	871-4685	
169.	AK8Y	E	Mike Cauley	1462 S. Carpenter Apt 160	Brunswick, OH 44212	225-7438	
170.	KA8Y	E	Shirley Lantz	12745 Vincent Dr.	Mantua, OH 44255	562-5858	
171.	KW9Y	E	Don Hilderman	596 Canterbury Rd.	Bay Village, OH 44140	871-6024	
172.*	KA8YEA	N	Eileen Neubeck	3289 W. 41 St.	Cleveland, OH 44109	631-6087	UL
173.*	KD8YM	A	Mike Willemin	331 Courtland St.	Elyria, OH 44035	1-324-4574	
174.	WB8YNX	A	Clyde Lorenz	P O Box 147	Clinton, OH 44216	1-882-3315	
175.	NB8Z	E	Larry Ferrone	2531 Canterbury Rd.	Westlake, OH 44145	835-9428	
176.	KB8ZA	A	Jim Baird	3110 Klusner Ave.	Parma, OH 44134	843-2442	
177.	KA8ZEP	T	Ann Wadsworth	11028 Hawke Rd.	Columbia Station, OH 44028	1-748-2816	
178.	KD8ZK	A	Ed Zorn	4878 Autumn Ln.	Brooklyn, OH 44144	741-9174	
179.	KA8ZRF	T	Jack Nilsson	26101 Country Club #1007	North Olmsted, OH 44070	734-6046	
180.	KA8ZRG	T	David Hoffmann	30015 Sequoia Trail	Westlake, OH 44145	835-8275	
181.	KA8ZRH	G	Edward Milliron	4009 Carlyle Ave.	Cleveland, OH 44109	651-8191	UL
182.	KA8ZTY	T	George Rybicki	10791 Creek Moss Ln.	Strongsville, OH 44136	238-0121	
183.	KA8ZTZ	N	Cody Williams	9976 Fairtree Dr.	Strongsville, OH 44136	238-6034	
184.*	KA8ZUA	N	Kathy Hitesman	356 Bradley Rd.	Bay Village, OH 44140	871-3055	UL
185.	KA8ZUB	N	Paula Noaker	115 S. Rocky River Dr #603	Berea, OH 44017	826-3739	UL
186.*	KA8ZUC	N	Diane Nilsson	26101 Country Club #1007	North Olmsted, OH 44070	734-6046	
187.*	KA8ZVK	N	Merilee Nestor	39114 Route 303	Grafton, OH 44044	1-355-8697	
188.	KA8ZVU	N	Terry Holstein	8422 Lorraine Dr.	Strongsville, OH 44136	238-0999	
189.*	KA8ZVV	N	Mary Wolf	27132 Butternut Ridge Rd.	North Olmsted, OH 44070	777-1177	
190.*	KA8ZVW	N	Gene Wells	5955 Burns Rd.	North Olmsted, OH 44070	779-8999	
191.*	KA8ZVX	N	Jason Hitesman	356 Bradley Rd.	Bay Village, OH 44140	871-3055	UL
192.*	-		Tina Stroh	917 Salem Ave.	Elyria, OH 44035	1-365-2793	

\* Denotes Family Member

NOTE: For changes or corrections, please contact Rick K8SCI or Pauline KA8FOE at 779-8999, thank you.



North Coast Amateur Radio Club - MINI ROSTER - October 20, 1986

CALL	NAME	CALL	NAME	CALL	NAME	CALL	NAME
KB8-A	DAN	KD8-EQ	DICK	KD8-JQ	DON	K8-TKQ	HOWARD
K8-AAI	BOB	WA8-ERA	LEE	W8-KGA	LARRY	WA8-TMK	FRED
W8-ADV	RAY	W8-ETC	LEN	WD8-KHU	MARK	KA8-TQR	DENNIS
WL7-AEC	TOM	N8-ETP	TOM	KC8-KI	JOHN	KB8-TT	DAVE
N9-AGC	GREG	N8-ETQ	DAN	WD8-KTC	MARIE	K8-TTZ	BOB
WD8-AJF	DAN	N8-ETW	ERNIE	KA8-LIH	KAREN	WB8-UDA	FRED
KB8-AK	PAT	N8-ETY	DAVE	N8-LL	JIM	KA8-UFN	OLLIE
N8-API	GEORGE	N8-ETZ	MARY	WD8-LRZ	LARRY	K8-UHX	J D
N8-ATV	JERRY	KA8-EVS	CHARLIE	AI8-M	DAVE	K8-UID	RON
N8-AUH	DAVE	KD8-EX	TOM	KV8-M	TOM	WB8-UPA	RUSS
K8-AZ	TOM	KC8-F	HEINZ	NO8-M	STEVE	K8-UTE	BASIL
WA8-AZO	JOE	W8-FAZ	JOE	K8-MBZ	DAVE	KA8-VDU	AL
W1-BBW	SHELLY	N8-FCX	RON	K8-MDC	FRED	K8-VJG	RON
KA8-BJA	FRANK	N8-FDY	TOM	K8-MGH	LOU	KA8-VYN	STEVE
W1-BKZ	PETE	N8-FEG	PETE	WD8-MHL	RAY	KA8-WAR	JOE
KE8-BN	MARK	N8-FGR	WAYNE	WD8-MHR	ERIC	KA8-WCK	ROY
N8-BO	CHARLIE	N8-FIL	RICH	K8-MO	JEFF	KA8-WHK	RALPH
WB8-BPA	DON	N8-FKS	DON	W8-MW	MAYNARD	KA8-WJH	JOE
KA8-BPU	RAY	N8-FKT	BOB	WB8-NAQ	BILL	K8-WNE	GEORGE
N8-BTB	STEVE	KA8-FOE	PAULINE	WA8-NXT	FERD	KA8-WQN	EVELYN
K8-BVI	ART	WA8-FOV	TED	WB8-NXT	NEIL	KA8-WRZ	LARRY
N8-BYW	BUD	N8-FQQ	TOM	WD8-OCI	BOB	W8-WXR	ROGER
AE8-C	SY	N8-GJR	JIM	WD8-OMW	GLENN	AE8-X	JIM
W8-CEJ	MEL	W8-GNB	EDDIE	K8-OPV	GEORGE	AJ8-Y	DENNIS
W8-CEM	CHUCK	N8-GNJ	STEVE	N4-OSD	CHUCK	AK8-Y	MIKE
W8-CHA	STEVE	N8-GNL	JOHN	WD8-OYO	DAVE	KA8-Y	SHIRLEY
WD8-CHL	JIM	HR3-GS	GLADIS	WD8-PAQ	BOB	KW9-Y	DON
KB8-CI	TOM	WA8-GZC	MARION	KA8-PEF	JOE	KA8-YEA	EILEEN
N8-CKV	PAUL	N8-HAD	SKIP	W8-PEV	JIM	KD8-YM	MIKE
KA8-CKZ	BILL	N8-HHE	ROB	WA8-PJK	PAUL	WB8-YNX	CLYDE
N8-CQD	BILL	N8-HOB	PAUL	K8-PPZ	TOM	NB8-Z	LARRY
KE8-CT	PETE	N8-HPV	ELIZABETH	WD8-QAC	AL	KB8-ZA	JIM
WA8-CTU	AL	N8-HSE	NAN	K8-QNK	DICK	KA8-ZEP	ANN
N8-DAD	BARB	N8-HTX	MONICA	KA8-QOQ	LARRY	KD8-ZK	ED
K8-DBG	DICK	N8-HUR	CARL	K8-REV	BOB	KA8-ZRF	JACK
K8-DBN	BILL	N8-HVQ	JACK	WB8-RGK	TIM	KA8-ZRG	DAVE
K8-DDY	BILL	W3-IGI	BILL	K8-RSH	CHUCK	KA8-ZRH	ED
KE8-DJ	DIANE	W7-IJ	BILL	K8-RWR	JOHN	KA8-ZTY	GEORGE
N8-DMK	RUSS	KA8-IMU	TONY	K8-RZP	JOHN	KA8-ZTZ	CODY
K8-DTS	BOB	WD8-INK	KEN	K8-SCI	RICK	KA8-ZUA	KATHY
WB8-DTY	TOMMIE	WD8-INO	STEVE	WD8-SDP	LIN	KA8-ZUB	PAULA
KE8-DX	DICK	W8-IO	BOB	KA8-SLX	CHRIS	KA8-ZUC	DIANE
WA8-DYL	GENE	WD8-IQO	MILT	WA8-SNI	CHARLIE	KA8-ZVK	MERILEE
KB8-DZ	JOE	WD8-IRG	VAN	KA8-SNM	CHERI	KA8-ZVU	TERRY
N8-DZO	JACK	WD8-ISB	DICK	K9-SSL	MIKE	KA8-ZVV	MARY
W8-EFW	PAUL	KR0-J	JEFF	KA8-SYT	JOHN	KA8-ZVW	GENE
N8-EIJ	KEN	N6-JAM	RON	NR8-T	TIM	KA8-ZVX	JASON
W8-EPM	JOE	WD8-JMM	AL	KA8-THY	EDNA	- TINA STROH	



# North Coast A.R.C. Officers

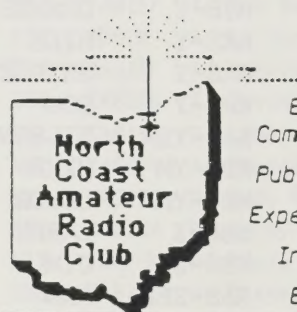
President - - -	Rick Wells	K8SCI	779-8999
V. President -	Bob Mills	K8TTZ	431-9492
Treasurer - - -	Glenn Christman	WD8QMW	221-6538
Secretary - - -	Steve Wolf	NO8M	777-1177

# North Coast A.R.C. Positions

Awards - - - - -	Fred	WB8UDA	U.L.
Contest - - - - -	Dave	KB8TT	942-5030
Editor - - - - -	Rick	K8SCI	779-8999
Education - - - -	Bob	W8IO	734-0570
Field Day - - - -	- - - - -	- - - - -	- - - - -
Finance - - - - -	- - - - -	- - - - -	- - - - -
Membership - - - -	Pauline	KA8FOE	779-8999
NCARES - - - - -	Rick	K8SCI	779-8999
Net Coordinator -	Steve	N8GNJ	1-365-2793
Programs - - - - -	Rick	K8SCI	779-8999
Public Relations -	Kathy	KA8ZUA	871-3055
Refreshments - - -	Pauline	KA8FOE	779-8999
Sunshine - - - - -	Pauline	KA8FOE	779-8999
Technical - - - - -	Jeff	KR0J	631-6087
VE Liaison - - - -	Bob	W8IO	734-0570

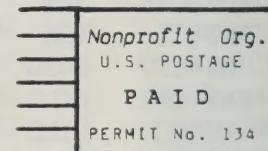
# North Coast A.R.C. Trustees

Pauline -	KA8FOE	779-8999
Jim - -	N8GJR	355-8697
Steve - -	N8GNJ	365-2793
Dick - -	WD8ISB	467-7733
Tom - - -	KV8M	238-6150
Ray - - -	WD8MHL	671-0317
Mike - -	K9SSL	225-1744
Tim - - -	NR8T	871-3055
Larry - -	KA8WRZ	476-8164



Emergency  
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Cleveland, Ohio 44130



N8GNJ

44035